

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:	)	
Hidehiro UCHIMI et al.	)	Group Art Unit: 2834
Application No. 10/539,036	)	Examiner: Burton S. Mullins
Filed: 12/22/2003	)	Confirmation No. 5999
For: VIBRATION-GENERATING SMALL MOTOR AND PORTABLE ELECTRONIC APPARATUS	)	Date: December 23, 2009

**REPLY BRIEF**

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Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

**INTRODUCTORY COMMENTS**

This is a reply brief filed in accordance with 37 CFR 41.31 in response to the Examiner's Answer mailed October 28, 2009. This reply brief is not intended to be a substitute brief replacing the original brief. Hence, the arguments submitted herein only address Examiner's arguments in the Examiner's Answer.

**I. STATUS OF CLAIMS**

A. Status of Claims in Proceeding

Claims 29-40 are currently pending in the application. Claims 1-28 have been cancelled.

Claims 29, 30, 35, and 36 are rejected under 35 U.S.C. §102(b), and claims 31-34 and 37-40 are objected to as being dependent upon a rejected base claim.

B. Identification of Appealed Claims

Claims 29, 30, 35, and 36 are being appealed. A copy of all of the pending claims as presented in the amendment filed February 23, 2007 is included in the attached Claims Appendix.

**II. GROUND OF REJECTION TO BE REVIEWED ON APPEAL**

1. Claims 29, 30, 35, and 36 stand rejected under 35 U.S.C. §102(a) as being anticipated by *Narusawa* (US 6,081,055).

### **III. ARGUMENT**

The arguments set forth below are supplemental to the arguments submitted in the Appeal Brief filed August 28, 2009. More particularly, the arguments present herein only address the Examiner's arguments presented in Sections (10)A through Section (10)E, in pages 6-11 of the Examiner's Answer. Hence, arguments submitted in the original brief are generally not repeated herein.

Initially, with respect to claim 29, the Examiner is thanked for generally concurring that there is proper support for claimed limitation "a plane including said pair of attachment faces".

With respect to claim 35, however, the Examiner contends in Section (10)A of the Examiner's Answer that the attachment rails 33c comprise three-dimensional U-shaped grooves running along the outside of holder 3, parallel to the shaft/spindle 12. Accordingly, the Examiner questions how the three-dimensional U-shape of the groove forming each of the "attachment rails" of claim 35, extending in parallel with the shaft, can lie in the same two-dimensional plane so as to be "included" in a single two-dimension Plans "S".

In response to the above-summarized contention and question from the Examiner, Appellant respectfully directs the Examiner's attention to the language of claim 35, which recites "a plane including said pair of attachment rails", among other features. As recited in claim 35, the attachment rails 35 include a portion (i.e., a portion or leg of the U-shape rail) that lies in a plane (i.e., plane "S"), as shown in marked up Fig. 3 presented in page 12 of the Appeal Brief filed August 28, 2009. That is, the attachment rails with a leg of the U-shape rails lying in the plane do not merely intersect the plane "S". Hence, claim 35 reciting "a plane including said pair of attachment rails" is fully supported by the specification and distinguishable over *Narusawa*.

Appellant respectfully disagree with the Examiner's first interpretation of the term "including" as referring to an "intersection" of the plane "S" with the attachment face or rail in Section (10)A of the Examiner's Answer, because such an

interpretation is biased toward the Examiner's application and interpretation of *Narusawa*, wherein marked-up Fig. 1C of *Narusawa* shows the plane "S" that only intersects the pair of spring pieces 33, as presented in the original appeal brief.

Appellant respectfully submits that claimed features are supported at least in the original drawings, and claims are to be given their broadest reasonable interpretation that is consistent with the specification.

With respect to the Examiner arguments presented in Section (10)B, Appellant respectfully disagrees with the Examiner's second interpretation of "a plane including said pair of attachment faces" (claim 29) and "a plane including said pair of attachment rails" (claim 35) as plane "Z", as plane "Z" does not correspond to plane "S" explained in the original appeal brief, as well as does not support Appellant's claimed features of "a plane including said pair of attachment faces" and "a plane including said pair of attachment rails", as recited in claims 29 and 35, respectively.

With respect to the Examiner's arguments presented in Section (10)C of the Examiner's Answer, Appellant respectfully acknowledges that the Examiner's plane "Z" may include spring pieces (i.e., "attachment faces") of *Narusawa*. However, the plane (i.e., plane "S") as discussed in recited in the original appeal brief is not in the same orientation as plane "Z" noted by the Examiner, and Appellant response to Section (10)A of the Examiner's Answer is applicable to Section (10)C as well.

With respect to the Examiner's argument in Section (10)D of the Examiner's Answer, the Examiner contends that Appellant's argument concerning *Takagi* are not relevant to the issues on appeal, Appellant respectfully reiterates that claims 29-34 of the present invention are identical to patented claims 1, 2, 4, 6, 7 and 18 of U.S. Patent No. 7,023,114 to *Takagi* issued by the U.S. Patent and Trademark Office, and, therefore, at least claims 29-34 should also be allowed.

With respect to the Examiner's argument in Section (10)E of the Examiner's Answer, Appellant's response presented above in relation to Sections (10)A-C are applicable.

**IV. Conclusion**

For the reasons set forth above, claims 29, 30, and 35 and 36 of the pending application define subject matter that is not anticipated under 35 U.S.C. § 102(a) in view of the *Narusawa*. Accordingly, reversal of the rejection of claims 29, 30, and 35 and 36, as well as the objection to claims 31-34 and 37-40, is respectfully requested.

Respectfully submitted,

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**V. CLAIMS APPENDIX**

1-28. (Canceled)

29. (Previously Presented) A vibration motor comprised of a motor body, a motor shaft projecting from the motor body, an eccentric weight attached to the motor shaft, and an attaching means for supporting said motor body in a horizontal prone posture at one surface of a board, wherein the attaching means has a pair of attachment faces straddling said motor shaft and extending in parallel with the same at the two sides of a motor case and a plane including said pair of attachment faces intersects with a circular orbit of the outermost point of the eccentric weight at two points.

30. (Previously Presented) A vibration motor as set forth in claim 29, wherein parts of said pair of attachment faces are positioned closer to said eccentric weight side than a center of gravity of said vibration motor itself.

31. (Previously Presented) A vibration motor as set forth in claim 29, wherein a distance between a center point of a line connecting said two points and a point where a diametrical line of said circular orbit passing through that center point intersects said circular orbit in a normal direction at a plane including said pair of attachment faces is at least the radius of said circular orbit and not more than the sum of said radius and the thickness of said board.

32. (Previously Presented) A vibration motor as set forth in claim 29, wherein: said motor body has an end cap for closing an opening of said motor case at the side opposite to said eccentric weight and a pair of external connection terminal pieces attached to said end cap, said attaching means has a pair of legs straddling said motor case in its thickness direction, a leg connecting part connecting said pair of legs on said motor case, and feet formed at the bottom of said legs, and said attachment faces are the back surfaces of said feet.



33. (Previously Presented) A vibration motor as set forth in claim 32, wherein said feet are formed by bending the bottom ends of said legs outward.

34. (Previously Presented) A board mounting structure of a vibration motor comprised of a vibration motor as set forth in claim 29 and a board provided with a cutaway space or an open space, wherein a pair of attachment faces of said vibration motor is affixed to one surface of said board at the sides of said cutaway space or said open space, and said vibration motor is mounted with at least said motor body in a state sunken in said cutaway space or said open space.

35. (Previously Presented) A vibration motor comprised of a motor body, a motor housing, a spindle projecting from the motor housing, an eccentric weight attached to the spindle, and an attaching means for supporting said motor housing in a horizontal prone posture at one surface of a board, wherein the attaching means has a pair of attachment rails straddling said spindle and extending in parallel with the same at the two sides of a motor housing and a plane including said pair of attachment rails intersects with a circular orbit of an outermost point of the eccentric weight at two points.

36. (Previously Presented) A vibration motor as set forth in claim 35, wherein parts of said pair of attachment rails are positioned closer to said eccentric weight side than a center of gravity of said vibration motor itself.

37. (Previously Presented) A vibration motor as set forth in claim 35, wherein a distance between a center point of a line connecting said two points and a point where a diametrical line of said circular orbit passing through that center point intersects said circular orbit in a normal direction at a plane including said pair of attachment rails is at least the radius of said circular orbit and not more than the sum of said radius and the thickness of said board.

38. (Previously Presented) A vibration motor as set forth in claim 35, wherein: said motor has a terminal blade mount for closing an opening of said motor housing at the side opposite to said eccentric weight and a pair of external connection terminal blades attached to said terminal blade mount, said attaching means has a pair of legs straddling said motor housing in its thickness direction, a leg connecting part connecting said pair of legs on said motor housing, and feet formed at the bottom of said legs, and said attachment rails are the back surfaces of said feet.

39. (Previously Presented) A vibration motor as set forth in claim 38, wherein said feet are formed by bending the bottom ends of said legs outward.

40. (Previously Presented) A board mounting structure of a vibration motor comprised of a vibration motor as set forth in claim 35, and a board provided with a cut-out or an open space, wherein a pair of attachment faces of said vibration motor are affixed to one surface of said board at the sides of said cut-out or said open space, and said vibration motor is mounted with at least said motor housing in a state sunken in said cut-out or said open space.